

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

Forest Pest Management
Box 5895, Asheville, N. C. 28803

REPLY TO: 5230 Evaluation

April 24, 1975

SUBJECT: Visit to recreation areas - London Ranger District



TO: Robert F. Collins, Forest Supervisor
Daniel Boone National Forest

This report was prepared by Bill Sites following the recent visit of our people to recreation areas on the London Ranger District.

On April 1, 1975, Mr. James Ward, Ms. Betty White, and I visited the White Oak Campground on Laurel River Lake on the London Ranger District. On April 15, Betty and I examined the proposed sites now known as Sam's Branch and Laurel Bridge. The purpose of our visits was to examine trees in these areas for damaging insects and diseases.

No insects of any seriousness were observed at this time. However, problems could occur with black turpentine beetle, *Dendroctonus terebrans*, or the southern pine beetle, *D. frontalis*. In addition, a slug sawfly, *Caliroa* sp., which defoliates oaks was detected on the District last summer. The District should maintain close field surveillance for these pests and notify the Asheville Office of Forest Pest Management if infestations are detected in the area.

With a few exceptions, the hardwoods in these areas appear to be healthy and in good condition. The few that are not at White Oak apparently died this winter. There is no reason to expect any major problems with the hardwoods in any of the areas other than the decline and death of some limbs, a condition common among oaks and maples. Annual inspections should pinpoint any of these in future years.

Examination of the shortleaf and Virginia pines revealed a number of diseases common to pathologically overmature pines. The important ones we observed are:

Annosus root rot, caused by the fungus *Fomes annosus* is a root and butt rot that can predispose infected trees to windthrow. Fruiting bodies were found on two stumps. Trees around campsites, boat docks along roads and trails should be examined annually. Fruiting bodies at tree bases and crowns that are sparsely foliated with yellow colored needles indicate possible infection. Minimizing root and butt

injury during construction and maintenance will reduce the risk of additional infections.

Armillaria root rot, caused by the fungus *Armillaria mellea*, is a root rot fungus which can also weaken the roots of infected trees. A vegetative structure, the rhizomorph, can often be found under loose bark of stumps and butts. It appears as a black, flattened, shoestring-like structure. The fungus commonly infects and kills both hardwoods and pines of reduced vigor. It was the final agent in a succession of problems that resulted in the slowdown of Virginia pine along the main trail just south of its intersection with the trail to the Blue Group.

Red heart, caused by *Fomes pini*, is prevalent in both the Virginia and shortleaf. Trees infected with this fungus are subject to top breakage.

Eastern gall rust, caused by *Cronartium cerebrum*, causes stem and limb galls on Virginia pine. The galls and subsequent decay associated with them can also weaken stems and make them more prone to breakage.

Pines and a few hardwoods at White Oak which appeared to be of the most immediate danger were marked. Unfortunately, it is impossible to know the life expectancy of the remainder. However, by inspecting them regularly, hardwoods for dead limbs and pines for root and stem rots, the hazards can be reduced.

At White Oak the pines pose the greatest potential threat to campers and facilities. Of the five camping clusters, the Gray and Green Groups will need to be observed the most closely because of the high percentage of pines in them.

At Laurel Bridge the pines are younger and healthier and offer many years of service. If, during picnic area construction, they are thinned, it would be advisable to apply borax to the stumps. When applied immediately after the cut, it can reduce the danger of *F. annosus* infection of the residual trees.

Since the southern pine beetle has recently been reported in Kentucky (Laurel, Knox and Bell counties), a close watch on pines would be advisable. This is particularly true of the trees at White Oak. Their poor condition makes them prime targets for beetle attacks. In this regard we will be of some assistance since members of our staff will be

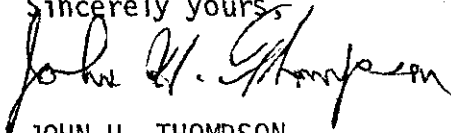
flying over the area in late spring or early summer.

One tree at White Oak (Gray Group) was found to be infested with the black turpentine beetle. The attack is inactive and of no consequence. However, root and butt injuries suffered during construction and maintenance could attract larger and more damaging outbreaks. When wounds do occur, a tree wound dressing paint should be applied. This not only helps prevent attacks by insects and fungi but may also help obliterate the injury and reduce attention from patrons who may further it.

We enjoyed working with Don Kight and Wes Harvey and compliment them on the efficiency of their operation. Our compliments to all of you on the installation of posts for lanterns and clothes lines. Severe injuries to trees can be inflicted by both.

Please feel free to call if we in Forest Pest Management can be of any further service.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "John H. Thompson".

JOHN H. THOMPSON
Field Office Supervisor